

Claims

1.-12. (canceled)

13. (new) A method for forwarding a signaling message embodied accordance with a first signaling protocol from a first device within a first network to a second device within a second network, comprising:

receiving the signaling message;

connecting the first and second networks by a third network;

providing a network access device in the third network;

transferring the signaling message from the first device to the network access device by tunneling the message through the third network;

determining if the first signal protocol and a second signaling protocol supported by the second device are the same protocol, the determination made by the network access device and based on a target datum identifying the second device;

if the protocols are the same the method further comprising

converting the signaling message into the second signaling protocol,

transferring the converted signaling message to the second device by tunneling the message through the third network; and

if the protocols are not the same the method further comprising

transferring the signaling message to the second device by tunneling the message through the third network.

14. (new) The method according to claim 13, wherein protocol conversion is handled by the network access device.

15. (new) The method according to claim 13, wherein the network access device performs functions of a telecommunication device, which serves for a switching of a connection for a transfer of voice data in a private data transfer network.

16. (new) The method according to claim 13, wherein the network access device switches a connection that transfers voice data in a private data transfer network.

17. (new) The method according to claim 16, wherein a data transfer network functions according to the internet protocol.

18. (new) The method according to claim 13, wherein the network access device performs a network access function for a plurality of terminal devices of a local data network

19. (new) The method according to claim 13, wherein the network access device performs a network access function for a central device of a plurality of local data transfer networks, the central device perform services for a plurality of terminal devices of a data transfer network.

20. (new) The method according to claim 13, wherein a the first and second signaling protocols are selected from the group consisting of SIP, H.323, QSIG, SIP based, H.323 based, QSIG based, and combinations thereof.

21. (new) The method according to claim 13, further comprising:
reading the target datum with an access function that reads target data of various signaling protocols; and
determining the first signaling protocol of the received signaling message;

22. (new) The method according to claim 20, wherein no protocol conversion is required if the first and second signaling protocols are in a same protocol family.

23. (new) The method according to claim 13, further comprising:
storing the first protocol signal in a storage device; and
deciding if a protocol conversion is required after the storage step.

24. (new) The method according to claim 13, wherein the signaling message relates to a transfer of voice data and/or to the performance of additional service features for the transfer of voice data.

25. (new) The method according to claim 24, wherein the transfer of voice data is in an operating data packet.

26. (new) A program for determining if a signaling message embodied accordance with a first signaling protocol supported by a first device requires conversion to a second signaling protocol supported by a second device, comprising:

- a receiver for receiving the signaling message;
- a target datum identifying the second device and thereby identifying the second signaling protocol;
- a comparator that compares the first signaling protocol of the signaling message with the second signaling protocol; and
- a converter that converts the signaling message into the second signaling protocol if the comparator indicates the first and second signaling protocols are different.

27. (new) The program according to claim 26, wherein the converter transfers the signaling message to a network access device to do the conversion.

28. (new) The program according to claim 26, further comprising a storage interface that stores the signaling message.

29. (new) The program according to claim 26, further comprising a transferring section that transfers the signaling message to the second device.

30. (new) A network access device for forwarding a signaling message from a first device in a first network to a second device in a second network, comprising:

- a control device for evaluating the signaling message and determining the second terminal device;
- a compare device that compares a first signaling protocol of the signaling message received from the first device and a second signaling protocol supported by the second device; and
- a transfer device that transfers the signaling message to the second device.

31. (new) The network access device according to claim 30, further comprising an interface that accesses a storage device, the storage device comprising an association between a terminal device and a server as well as an association between a protocol and the server.

32. (new) The network access device according to claim 30, further comprising a conversion device that converts the signaling message embodied according to the first signaling protocol to a second signaling message protocol.